DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Daniel T. Adams
REGISTERED CIVIL ENGINEER

July 1, 2002
PLANS APPROVAL DATE

Daniel T. Adams
No. C46476
Exp. 6-30-03
CIVIL
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER

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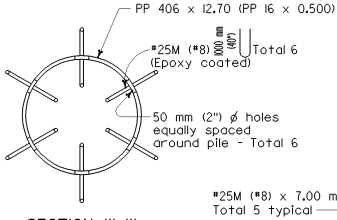
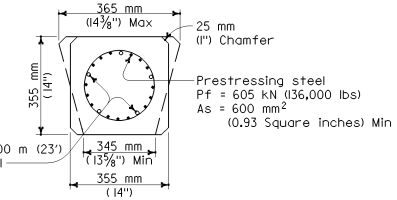
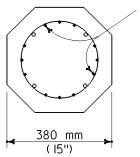


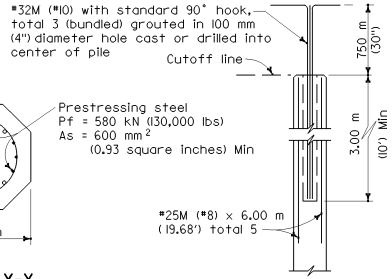
SECTION W-W
PP = Steel pipe pile



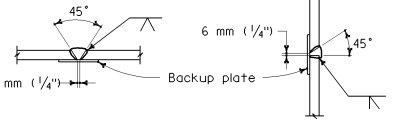
SECTION X-X



SECTION Y-Y



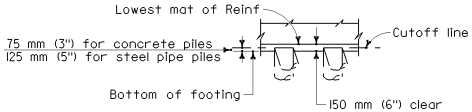
ALTERNATIVE PILE ANCHOR FOR PRESTRESSED PILE



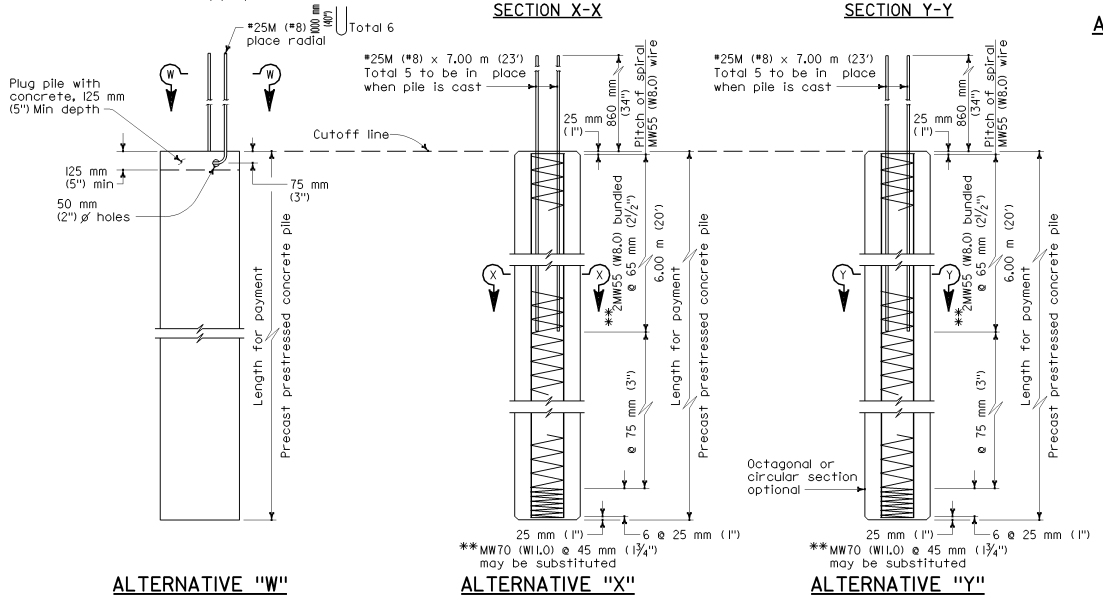
SINGLE VEE-GROOVE SINGLE BEVEL-GROOVE

PILE WELDING DETAIL - BUTT JOINTS

Notes: 1. Single Vee-Groove permitted for all positions.
2. Single Bevel-Groove permitted for horizontal joints only.



PILE EMBEDMENT



ALTERNATIVE "W" ALTERNATIVE "X" ALTERNATIVE "Y"

NOTES:

1. Concrete in Class 900C (100C) Piles shall contain not less than 450 kilograms of cement per cubic meter (752 pounds per cubic yard).
2. Pile reinforcement extending into footing shall be hooked as required to provide clearance to top of footing.
3. Lapped splices in sprial pile reinforcement shall be lapped 80 wire diameters minimum. Sprial pile reinforcement at splices and at ends shall be terminated by a 135° hook with 150 mm (6") tail hooked around a longitudinal bar or strand.
4. At the Contractor's option, alterntive steel pipe with at least the diameter and wall thickness shown on these plans may be used. The diameter shall not exceed 460 mm (18").
5. Alternative "W" piles shall not be used for CLASS 900C (100C) pile.
6. Maximum cut-off length at the top of the Alternative "X" and Alternative "Y" piles is 3 m (10').

DESIGN NOTES

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1983 AASHTO with Interims and Revisions by CALTRANS)

DESIGN CAPACITY: Compression = 900 kilonewtons (100 ton) [Service state]
= 1800 kilonewtons (200 ton) [Nominal axial resistance]
Tension = 900 kilonewtons (100 ton) [Nominal axial resistance]

REINFORCED CONCRETE: f'c = 28 MPa (4,000 psi)
fy = 420 MPa (60,000 psi)

PRECAST PRESTRESSED PILES: Pf = Prestress Force (After losses)
Concrete Strength f'c @ 28 days = 48 MPa (7,000 psi)
fci @ transfer - 28 MPa (4,000 psi)

STEEL PIPE PILE: Fy (minimum yield strength) = 240 MPa (35,000 psi)
Fu (minimum tensile strength) = 400 MPa (58,000 psi)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PILE DETAILS
CLASS 900 (100) AND CLASS 900C (100C)

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses ( ). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

NO SCALE

B2-8